ABSTRACT

A first pulse sequence is executed on an imaging portion of an object to be examined using a multiple receiving coils including a plurality of receiving coils to obtain sensitivity images 701 to 703, each of n in number, which is smaller than the number of examination image. When those sensitivity images are calculated, NMR signals are measured only in a low-frequency region of a k space. Next, a second pulse sequence is executed while phase encoding steps are thinned out to acquire examination images 704 and 705, each of m in number(m>n), of the object with each receiving coil. When sensitivity distributions 707 and 708 are generated on the basis of sensitivity images 701 to 703, if a sensitivity distribution on a slice corresponding to examination images 704 and 705 is not yet measured, it is calculated with a slice interpolation processing on the basis of sensitivity distributions 701 to 703, and an aliasing artifact in examination images 704 and 705 are removed using sensitivity distributions 707 and 708 with a matrix calculation.